

ABSTRACT

In a process for the use of a hydrocarbon feedstock (10) by reacting the feedstock in a reactor (11) with oxygen (9) to form a synthesis gas containing at least carbon monoxide, carbon dioxide and hydrogen and subjecting the synthesis gas to a conversion process comprising an exothermic reaction to produce dimethyl ether in a converter (15), the converter operating at an operating pressure, said oxygen being provided to the reactor at an oxygen pressure, the synthesis gas is produced at a pressure higher than the operating pressure of the converter.